

SOVIET COMPUTER PRODUCTION DEVELOPMENTS

25X1

new have in production a completely transistorized analog computer and are on a partly transistorized digital computer.<sup>1/ 2/</sup> This analog computer, Model M-10, is designed for the solution of up to sixth order differential equations, weighs less than 77 pounds, and occupies about 3 square feet of desk space.<sup>2/</sup> Series production reportedly began in 1958. The Soviets have consistently put a relatively greater emphasis on analog computers than the US and in this accomplishment are estimated to be approximately two years ahead of comparable US production efforts. This represents a relatively high level of skill, not only in computer production techniques, but also in the mastery of the accompanying problems in transistor technology, precision electronic component manufacture, research and test equipment manufacture, and stabilization techniques. A number of their instruments were on display at the New York automation exhibition.<sup>3/</sup>

A transistorized computer is not only a powerful tool for scientific research and industrial control work, but since it is significantly smaller, uses far less electric power and radiates very little heat, it can be readily adapted to airborne control applications and other critical military uses.

25X1

25X1

25X1

Soviet

computer production is at present concentrated at computer plants in  
(SAM)  
Moscow and Penza. The Moscow Computing and Analyzing Machine Plant had,  
by mid-1957, achieved a production rate of 100 computers a month of all  
types, and reportedly had a total employment of 6,000. <sup>5/</sup> This is  
significantly greater than the previously estimated labor force at this  
plant. Earlier information indicated that the labor force at the Moscow  
SAM Plant was no more than about 2,500 in 1956. <sup>5/</sup>

25X1

25X1

computers produced there were of a specialized type for atomic or  
aeronautical research, rather than the general purpose type such as the  
US produced "Univac". The plant not only produced the computers, but  
also manufactured a large number of the specialized components, with  
extensive use being made of standardized subassemblies for the various  
functional elements.

25X1